UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,720	02/28/2001	Richard Spitz	10191 1614	3872

26646   7590   07/10/2003

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EXAMINER
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ART UNIT	PAPER NUMBER
1765	

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 30 June 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may <u>only</u> be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

<u>PERIOD FOR REPLY</u> [check either a) or b)]

a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action, or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

     NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Continuation Sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: *16-25,27-30,32 and 34*.

   Claim(s) objected to: _____.

   Claim(s) rejected: *31,33 and 35*.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

Continuation of 5. does NOT place the application in condition for allowance because: The applicants argue that Lee reference does not disclose the step of "exposing, subsequent to the selective etching, the silicon element to a heat treatment in a vacuum at an elevated temperature". According to the applicants, Lee's Fig 5 discloses the vacuum applied to the chamber is removed after the in-situ Pre-cleaning and pumping steps; the subsequent Venting, Seeding layer and Heat Treatment steps are not performed in a vacuum. The examiner strongly disagrees. In Fig 5, Lee clearly shows that after the step of Pre-cleaning, the pressure in the chamber is significantly reduces to a flat line after pumping and venting the gas out off the chamber. The pressure in the chamber is at the bottom flat line during the heat treatment step (read on "vacuum", See Fig 5). The examiner, therefore, interprets that Lee clearly teaches the step of "exposing, subsequent to the selective etching... a second heat treatment in a vacuum at a second elevated temperature".

The applicants further argue that Choi reference fails to disclose that the heating process at the first temperature is carried out in the vacuum. According to the applicants, Choi teaches that the heating process is performed prior to the introduction of ClF3 (i.e., heating is not performed in vacuum). The examiner disagrees. Choi teaches the etching step is performed in a vacuum chamber having pump using ClF3 etchant gas under low pressure. The low pressure exists in the chamber dues to the flow of ClF3 etchant in conjunction with the pump being turn on. Prior to the introduction of ClF3 (i.e., there is no ClF3 gas in the chamber), the vacuum must exists because of the pump. Therefore, the examiner still maintains that Choi reference clearly teaches the above heating step in a vacuum

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